Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) Method for pretreating via centrifuging samples contained in tubes—placed in containers prior to being introduced into an automatic analysis device, the centrifuging being effected in a centrifugal machine comprising a rotor with a vertical axis, a plurality of boats being mounted tilting at the periphery of said rotor, said boats being able to each contain one container with tubes of samples, said method comprising the steps of detecting the presence of tubes inside the containers at the time they are transported to the centrifugal machine, detecting a foreseeable lack of balance of the centrifugal machine and when this detection reveals the presence of this lack of balance owing to the presence of incomplete containers or an odd number of containers:

simulating the load of the centrifugal machine incorporating the incomplete container;

selecting a balancing container according to the number of tubes missing in the incomplete container;

determining the boat of the centrifugal machine inside which the balancing container needs to be arranged so as to obtain a good balancing of the load;

placing this container in said boat in the place of the samples container which would be there, thus provoking a shift in the order of the introduction of the balancing containers in the centrifugal machine;

putting back the balancing container on its storage area at the time of transferring the sample containers to the automatic analysis device once centrifuging has been carried out.

2. (Previously Presented) Method according to claim 1, wherein, in the case where the capacity of the containers is five tubes and where the centrifugal machine tolerates a lack of balance equal at least to that brought about by the absence of a tube, it only uses two balancing containers respectively corresponding to one container containing two tubes and one container containing four tubes so as to compensate all the possible lacks of balance.

3. (Previously Presented) Method according to claim 1, wherein in order to determine the positioning of the containers inside the centrifugal machine, it comprises the steps of constructing a virtual rotor containing the containers in which the presence of the tubes has been detected by presence detectors, calculating an optimum arrangement and the unbalance of this arrangement, testing to know if the unbalance is correct or not, the balancing treatment ending if the unbalance is correct,

in the case where the unbalance is incorrect, determining the state (full or empty) of the centrifugal machine, if an available place exists adding a balancing container to the virtual rotor, calculating an optimum arrangement,

if the new unbalance of the rotor is correct, ending the balancing treatment ~~ends~~;

if the new unbalance is incorrect, eliminating the balancing container,

testing to know if there is a container able to be eliminated,

if this is not the case ending the treatment ~~ends~~ and trigerring an error signal,

whereas if there is a container able to be eliminated eliminating the last container from the virtual rotor—and calculating the optimum arrangement,

in the case where the unbalance of the rotor is incorrect, returning to the balancing addition step, the treatment being ended if this unbalance is correct.

4. (Previously Presented) Method according to claim 3, wherein, if during the test carried out to know if the centrifugal machine is full, the virtual rotor is full, it comprises a direct passage to the determination stage if there exists a container able to be suppressed.

5. (Currently Amended) Method according to claim 3~~ or 4~~, wherein the stage for finding an optimum rotor successively comprises the calculation of the rotor of the unbalance of the rotor, the determination of the optimum rotor and of the optimum unbalance, a test to know if the unbalance is lower than a predetermined threshold and lower than the optimum unbalance, if the unbalance is lower than said threshold, the search for the optimum rotor ends; if the unbalance is lower than the optimum unbalance, the determination is made of the optimum rotor and of the optimum unbalance and of the existence of a possible permutation, it being understood that if the unbalance is lower than the optimum unbalance the system passes directly to the step of determination of a possible permutation, the search ending if no permutation is

possible, whereas if a permutation is possible the system carrying out the permutation, calculating the unbalance of the rotor and then returning to the step of testing to know if the unbalance is lower than a predetermined threshold for a new sequence.

6. (Previously Presented) Device for pretreating via centrifuging samples contained in tubes placed in containers prior to being introduced into an automatic analysis device, the centrifuging being effected in a centrifugal machine comprising a rotor with a vertical axis, a plurality of boats being mounted tilting at the periphery of said rotor, said boats being able to each contain one container with tubes of samples said device comprising a feeding station placed along one lateral side of the centrifugal machine opposite a feeding station of the analysis robot, this feeding station comprising a first thrustor able to move in translation and used to extract the containers contained in the feeding station, bring them into a storage area adjacent to a belt conveyor which circulates parallel to the rear side of the centrifugal machine perpendicular to the displacement axis of the thrustor, a grasping mechanism able to transfer the containers situated on the belt conveyor into the boats of the centrifugal machine which come out of an opening situated in a

feeding area and bring them back onto the belt conveyor after centrifuging, said belt conveyor transporting the centrifugal thrustors to a transport area situated on one lateral side of the centrifugal machine adjacent to the feeding station of the robot, said transport area comprising a second thrustor able to move perpendicular to the running off direction of the belt conveyor so as to transfer via a translation movement the containers brought by the belt conveyor into the feeding station of the robot.

7. (Previously Presented) Device according to claim 6, wherein the distribution of the containers in the feeding station of the robot is effected by means of an endless belt mounted on rollers axed vertically and bearing a drive cam.

8. (Previously Presented) Device according to claim 6 comprising a device for detecting the presence of tubes inside the containers at the time they move from the feeding station to the belt conveyor, this detection device comprising a row of detection jacks axed perpendicular to the displacement axis of the containers and mounted on a structure able to move in translation above the containers from the station to the belt conveyor.

9. (Previously Presented) Device according to claim 8, wherein said mobile structure of the device is integral with the structure of said grasping device.

10. (New) Method according to claim 4, wherein the stage for finding an optimum rotor successively comprises the calculation of the rotor of the unbalance of the rotor, the determination of the optimum rotor and of the optimum unbalance, a test to know if the unbalance is lower than a predetermined threshold and lower than the optimum unbalance, if the unbalance is lower than said threshold, the search for the optimum rotor ends; if the unbalance is lower than the optimum unbalance, the determination is made of the optimum rotor and of the optimum unbalance and of the existence of a possible permutation, it being understood that if the unbalance is lower than the optimum unbalance the system passes directly to the step of determination of a possible permutation, the search ending if no permutation is possible, whereas if a permutation is possible the system carrying out the permutation, calculating the unbalance of the rotor and then returning to the step of testing to know if the unbalance is lower than a predetermined threshold for a new sequence.